

GENERAL FEATURES

A. SURVEY AREA

This report covers a 10-county region centered on Albemarle Sound in northeastern North Carolina. The 10 counties are Bertie, Camden, Chowan, Currituck, Gates, Hertford, Martin, Pasquotank, Perquimans, and Washington (Figure 1). This portion of the state lies in the Embayed Region of the Coastal Plain physiographic province. The survey area includes all portions of these counties with the exception of Currituck Banks and Kotts Island in Currituck County. Albemarle Sound, proper, is also excluded from the survey.

These 10 counties are relatively sparsely populated, with no county having more than a population of 30,000 as of 1980 (see Table 1). The largest town, Elizabeth City, had a 1980 population of 13,784. The population of the 10-county region is growing rather slowly, with a few counties losing population; however, mainland Currituck County is undergoing rather rapid population growth.

B. TOPOGRAPHY AND PHYSIOGRAPHY

Because these 10 counties lie on the lower terraces of the Coastal Plain, and especially as they lie near tidal waters, the topography of the landscape is very subdued. Elevations range from sea level (in most of the counties) to nearly 100 feet west of Murfreesboro in Hertford County. More than 95% of the region can be considered flat; however, there are several areas with steep slopes. Elevation differences of more than 50 feet are found on north-facing slopes along the southern edge of the Roanoke River floodplain, generally in Martin County, and along the Meherrin River near Murfreesboro in Hertford County. Bluffs in northwestern Martin County are approximately 65 feet high. Highly significant topographic features include a series of north-south trending scarps that were former shorelines when the Atlantic Ocean was higher and extended much farther inland than at present. Most such scarps show only a 10- to 15-foot drop in elevation from the higher terrace on the west to the lower terrace on the east. The major remnant shoreline is the Suffolk Scarp, which extends from southeastern Virginia south through eastern Gates County to western Washington County and southward out of the Albemarle-Pamlico Estuarine Study area (hereafter, A/P Study). Elevation changes from west to east at the scarp show a drop from approximately 40 feet above sea level to about 6 feet above sea level.

There are approximately 7 terraces in the North Carolina Coastal Plain. Of these 7 terraces, only the lower four (Wicomico, Penholoway, Talbot, and Pamlico) are present in the A/P Study area. The Wicomico Terrace has an average elevation of 90-100 feet mean sea level and is present in the western tip of Martin County, as well as near Murfreesboro in Hertford County. The Penholoway Terrace average about 70 feet, the Talbot Terrace about 42 feet, and the Pamlico Terrace about 25 feet (Stuckey 1965). The Suffolk Scarp divides the Pamlico Terrace on the east from the Talbot Terrace. Each terrace was formed in shallow seas when the scarp to the west was the shoreline at that time. With the lowering of sea level, the terraces became exposed.